



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region I – New England

DATE: March 11, 2013

SUBJ: Inspection Report
Hull, MA WWTP
MA0101231

FROM: David Turin, Inspector

TO: File

I. Background Information

A. Date, Time of inspection: 9 am to noon, March 6, 2013

B. Weather Conditions: Overcast, temperatures in the high 30s (deg. F)

C. USEPA Representatives: David Turin

D. Site Representative(s): John Marcin, Area Manager, United Water
Pete Nyberg, Plant Manager, United Water
Jim Dow, Asst Dir. DPW, Town of Hull

E. Address: 1111 Nantasket Avenue, Hull, MA

II. Purpose of Inspection

The inspector went to the facility to observe conditions at the facility following catastrophic flooding and loss of all electrical and hydraulic capacity at the plant that occurred on February 28, 2013. The inspection was also intended as an initial step to understanding the events leading up to the plant failure.

III. Inspection Details

On Wednesday, March 6, 2013 the EPA inspector, David Turin, was joined at the Hull WWPT by David Burns (MassDEP SERO) for a Reconnaissance Inspection of the Town of Hull, MA wastewater treatment facility at the above referenced address. The inspection was planned following the flooding of the facility and subsequent emergency bypass of the untreated wastewater that had began at approx 3:30 am, Thursday, February 28th and ceased at 10:55 pm, Saturday March 2nd. The inspectors were met by a number of United Water and treatment plant personnel, including, Beth Murphy, a United Water environmental compliance manager for Rhode Island, Connecticut, and Massachusetts United Water (401-226-3803); John Marcin, United Water Area Manager, Northeast Division (781-862-0777); Pete Nyberg, United Water Plant Manager (781-925-0906); and Jim Dow, Asst. Dir DPW, Chief Facility Manager WWTP, Hull Permanent Sewer Commission (781-925-1207). The site inspection was led by Mr. Marcin.

At the time of the inspection, emergency generators and pumps were in place and the emergency bypass had ceased 3.5 days prior to the inspection at approximately 11 pm Saturday, March 2. With the exception of screening and grit removal, all other wastewater processes were on-line.

According to Mr. Marcin, normal crews at the facility were being supplemented by approximately 20 additional United Water staff from other facilities and other parts of the country. Contract electrical personnel were also observed. In addition to the significant efforts to clean the facility and make additional modifications to improve the stability of the temporary measures, such as reconfiguring pumps and lines and electrical supplies, staff at the facility were planning for a winter storm anticipated that evening by armoring equipment to protect it in the event of a storm surge and developing contingency plans in the event of additional flooding. Plant personnel were also continuing their investigation regarding the cause(s) of the initial facility flooding. Though no report or official explanation has been provided, informally the inspector was told that a combination of high flows (1.3" of rain had fallen the previous day), influent pump failures, and high influent wet well levels that may have allowed flows to enter a 36" odor control conduit in the influent wet well are among the causes being investigated.

End of Report

Photos:



Photo 1. Emergency Bypass to Boston Harbor (not active at time of insp)



Photo 2. Armoring of emergency bypass effluent pump underway in the event of storm surge associated with storm anticipated that evening.



Photo 3: Portable fuel tank and emergency power generators in place for influent pumping.



Photo 4: Temporary pumping to influent wetwell.

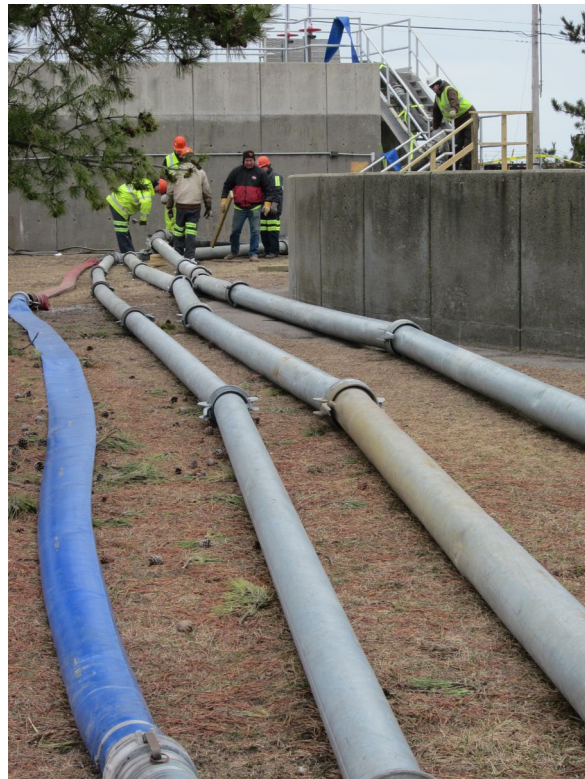


Photo 5: Temporary pumping of treated effluent to chlorine contact chamber.